REMARKS

Claims 1-35 are pending in the present application. Claims 1-5, 7, 8, 10-12, 19-21, 24, 25, 28-30, 32, 34, and 35 stand rejected, Claim 33 is allowed, and Claims 6, 9, 13-18, 22, 23, 26, 27, and 31 are objected to. New Claims 36-44 have been added. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-5, 7, 8, 10-12, 19-21, 24, 25, 28-30, 32, 34 and 35 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Siefert (U.S. Patent No. 6,355,916). Siefert discloses a closed loop heating system having a processor that applies an **offset** to the drive level (power level) in order to maintain a non-zero drive level. (See, e.g., Col. 5, lines 34-41). This offset is used to compensate for varying conditions such as room temperature and variability of instrument components such that zero error can be maintained under the given conditions. Siefert also states that a non-zero drive level must be maintained, (Column 5, lines 34), hence the use of an offset to prevent the drive level from reaching zero.

In contrast, the claimed invention employs a **scaling function** to vary the wattage levels of a single device for various applications. The scaling function is defined as the ratio between the power desired and the power in the line (See, e.g., page 13, lines 10-15). Therefore, the amount of power is scaled as a function of the amount of wattage desired for specific application requirements, a limitation which is wholly absent from the Siefert reference.

The scaling of power and the application of an offset are distinct and separate approaches to varying the amount of power applied to a heater or a power receiving device. By way of example, a scaling function is capable of producing a zero output, whereas in Siefert, a zero output is not possible with the existence of the offset, especially in light of the explicit disclosure of Siefert to maintain a non-zero drive level. Furthermore, the use of an offset versus a scaling function can more clearly be understood with the classic linear equation: $\underline{y = mx + b}$

With the offset approach, "b" corresponds to the offset, whereas with the scaling function, "m" corresponds to the scaling function. Accordingly, the control of power is different with a scaling function "m" as opposed to an offset "b." Therefore, since Siefert does not disclose a scaling function, the rejected claims cannot be anticipated and the Applicant respectfully requests that the outstanding claim rejections be withdrawn.

NEW CLAIMS

Applicant has added new claims 36-44 for the Examiner's consideration. Based on the art of record, Applicant submits that these claims are in condition for allowance and respectfully request allowance thereof.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt

and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7524.

Respectfully submitted,

Dated: _12 AUG 05_

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